UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte JIANBO LU, HONGTEI E. TSENG and DOUGLASS S. RHODE

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Appeal 2007-2644
Application 10/708,681
Technology Center 3600

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Decided: September 13, 2007

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Before TERRY J. OWENS, ANTON W. FETTING, and
JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

OWENS, Administrative Patent Judge.

DECISION ON APPEAL

The Appellants appeal from a rejection of claims 1-30, which are all of the pending claims.

THE INVENTION

The Appellants claim a system and method for controlling an automotive vehicle having a brake system. Claim 1 is illustrative:

> 1.   A control system for an automotive vehicle having a brake system comprising:

an object detection system generating an object detection signal and an object distance signal; and

a controller coupled to the object detection system, said controller programmed to generate a brake-steer signal proportional to the object distance signal in response to the object detection signal and the object distance signal and control the vehicle in response to the brake-steer signal.

THE REFERENCE

Matsuno   US 2001/0020217 A1   Sep. 6, 2001

THE REJECTION

Claims 1-30 stand rejected under 35 U.S.C. § 102(b) as anticipated by Matsuno.

OPINION

We affirm the aforementioned rejection.

The Appellants present a substantive argument only with respect to claim 1 (Br. 3). Regarding claims 2-30 the Appellants merely refer to their arguments set forth with respect to claim 1 (Br. 4). For that reason and because all of the independent claims (1, 8, 20 and 27) include the argued patentable distinction, we limit our discussion to claim 1. See 37 C.F.R. § 41.37(c)(1)(vii)(2004).

Matsuno discloses a vehicle motion control system that automatically brakes the vehicle based on the distance between the vehicle and an obstacle, the vehicle speed and a road gradient (abstract). When the motion control system's braking distance judging section judges that, with the

deceleration being applied, the vehicle cannot avoid contacting the obstacle, first and second yaw rates and a target yaw rate, which is the larger of the absolute values of the first and second yaw rates, are calculated. *See id.* An automatic brake control section calculates a target braking force based at least on the target yaw rate, and then brakes a selected wheel to steer the vehicle around the object. *See id.*

The Appellants argue that Matsuno's equations 4 and 5 indicate that Matsuno's first and second yaw rates are calculated without reference to the distance from the vehicle to an object and that, therefore, Matsuno does not control brake-steer in proportion to the sensed distance from the object (Br. 3). Matsuno, the Appellants argue, instead uses the object distance signal as an on/off condition precedent for enabling a brake-steer routine (Reply Br. 2).

Matsuno's brake control section (15e) outputs to a brake drive section (1) a brake fluid pressure signal that comes from 1) an automatic brake control section (15j) that receives an input signal from yaw calculating sections (15g,h,i), or 2) a deceleration calculating section (15d) (¶¶ 0029, 0049; fig. 1). Matsuno's brake fluid pressure signal is comparable to the Appellants' brake-steer signal (Appellants' Spec. ¶ 0137; fig. 22). Matsuno's deceleration calculating section (15d) calculates an automatic braking deceleration based upon the relative speed (V_r) of the vehicle and the object, and a road gradient (θ_{sL}) (¶ 0025). An input to the deceleration calculating section (15d) comes from a deceleration judging section (15c) that compares the distance (L_r) between the vehicle and the object with a

threshold distance (L_{lmt}) (¶ 0024). Because the input to the deceleration calculating section (15d) is based upon an object distance signal, and the output from the deceleration calculating section (15d) is an input to the brake control section (15e) that outputs the brake fluid pressure signal to the brake drive section (1), the brake fluid pressure signal is proportional to the object distance signal.

We therefore are not convinced of reversible error in the Examiner's rejection.

DECISION

The rejection of claims 1-30 under 35 U.S.C. § 102(b) over Matsuno is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

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